

# U.S. DEPARTMENT OF ENERGY OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

### TRIBAL ENERGY PROGRAM



**Peer Review** 

January 13-14, 2004

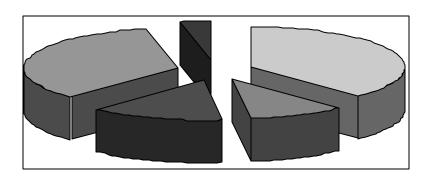
**Thomas Sacco** 

DOE, Golden Field Office

# **Department of Energy**

# Advancing Energy and National Security through Science, Technology and Environmental Stewardship

### **DOE Budget of \$23.4 Billion**



#### Energy (\$2.45 Billion) includes:

- Energy Efficiency and Renewable Energy (\$1.3)
- Fossil Energy (\$0.75)
- Nuclear Energy, Science and Technology (\$0.38)



- **■** Energy (10.5%)
- **■** Science (14.2%)
- **■** Environment (34.4%)
- Corporate
  Management (3.1%)





DOE's Office of Energy Efficiency and Renewable Energy (EERE)

### **EERE's Mission**

The EERE's mission is to strengthen America's energy security, environmental quality, and economic vitality in public-private partnerships that:

- Enhance energy efficiency and productivity;
- Bring clean, reliable and affordable energy technologies to the marketplace; and
- Make a difference in the everyday lives of Americans by enhancing their energy choices and their quality of life.





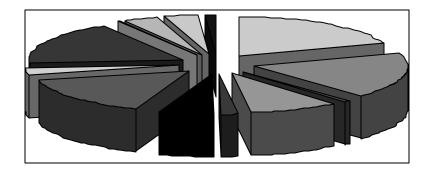






\$1.3 Billion Total EERE Budget Request (FY2004)

# Energy & Water Development Request \$444.2 Million



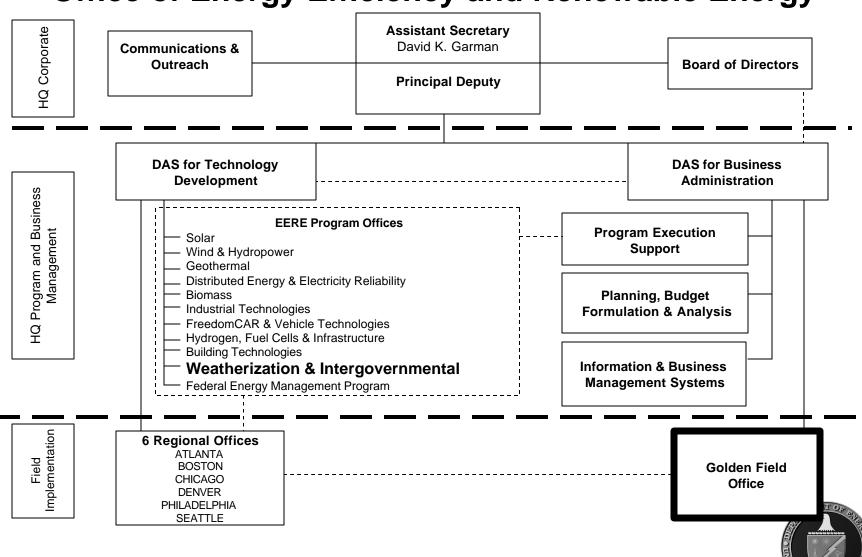
**Tribal Energy Requested FY2004 Budget: \$6 Million** 

- □ Hydrogen
- Solar Energy
- Zero-Energy Buildings
- Wind Energy
- Hydropower
- Geothermal
- Biomass/Biorefinery Systems R&D
- ☐ Intergovernmental Activities
- Electric Reliability
- ☐ Energy Management
- NCCTI
- ☐ Program Direction
- Facilities & Infrastructure





### Office of Energy Efficiency and Renewable Energy





Promote tribal energy self-sufficiency and economic development and foster employment on tribal lands through the use of renewable energy



### **Authority**

Section 2606 of Title XXVI Energy Policy Act of 1992 (P.L. 102-486)





"Indian land comprises 5% of the land area of the United States, but contains an estimated 10% of all energy resources in the United States"

"Wind resources in the Great Plains could meet 75% of the electricity demand in the contiguous 48 states." (Native American Energy Development and Self-Determination Act of 2003)





The most-burdened 10 percent of Indian households on reservations spend 20 percent or more of their income on electricity. Over twice the percentage of U.S. households at the same income level. (2000 EIA Report)

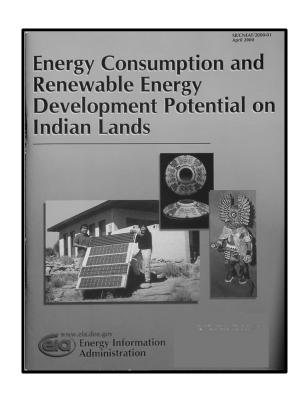


**Hopi Solar Installation** 





"Indian households on reservations are disproportionately without electricity. A total of 14.2% of Indian households have no access to electricity, as compared to only 1.4% of all U.S. households." Navajo accounts for 75% of the households without electricity (2000 EIA Report)



DOE funded the Navajo Nation Electrification
Demonstration Program (P.L. 106-511) resulting in 503
households electrified in fiscal year 2002



### **DOE's Tribal Energy Program**

### **Tribal Energy Program**

Providing financial and technical assistance to <u>Tribes</u> for feasibility studies and sharing the cost of implementing sustainable renewable energy projects on <u>Tribal Lands</u>



Tribes include Federally-recognized Tribes; Alaska Native villages; and Alaskan Native Corporations.

Tribal Lands include Indian reservations; Public domain Indian allotments; Former Indian reservations in Oklahoma; Land held by under the provisions of the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.); and Lands held in fee simple or under a Federal land lease.



### **Assist Tribes Meet Their Energy Goals**

- Developing in Cooperation with Tribes
- Providing Funding Opportunities
- Supporting Government-to-Government Relations
- Offering Technical Assistance
- Providing Information and Education
- Facilitating Government Collaboration and Leveraging Resources



# DOE's Tribal Energy Program

# **Tribal Energy Program Organization**

Program Management through DOE Headquarters, implementation through the DOE Golden Field Office, and technical support through the DOE's Laboratories.

Program Management

**Thomas Sacco** 

Weatherization and Intergovernmental Program
Office of Energy Efficiency and Renewable Energy (EERE)
Department of Energy, HQ

Field Implementation

DOE Golden Field Office Project Manager, Tribal Energy Program **Lizana Pierce** (303) 275-4727

Technical Assistance Sandia National Laboratories, Albuquerque Sandra Begay-Campbell (505) 844-5418 National Renewable Energy Laboratory **Roger Taylor** (303) 384-7389





### **Tribal Energy Program History**

# BETWEEN FY1994 AND FY2001, DOE FUNDED 51 PROJECTS TOTALING OVER \$9.5 MILLION

#### Title XXVI Projects (Funded FY1994)

-35 Projects in 13 States (\$6.5 million)

#### Remote Applications Projects (Funded FY99)

-8 Projects in 5 States (\$1.9 million)

### **Tribal Colleges and Universities (Funded FY00-01)**

- -7 Feasibility Studies in 6 States (\$700,000)
- -1 Project in New Mexico (\$431,000)



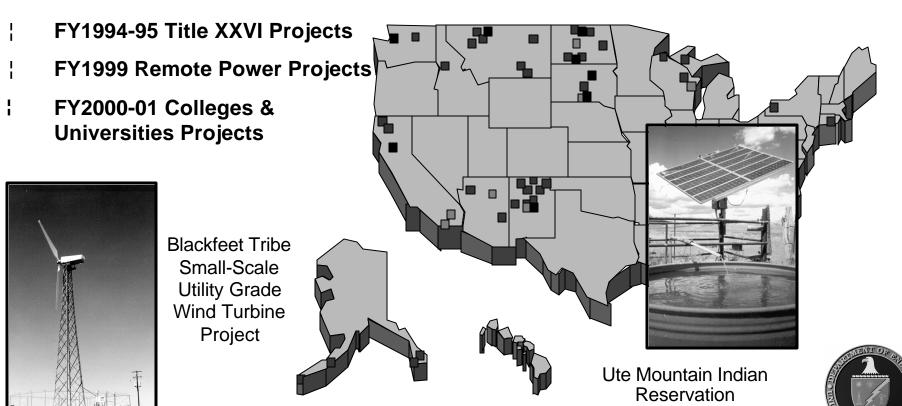
Solar Installation on Navajo Nation





# **Tribal Energy Program History**

# BETWEEN FY 1994 AND FY 2001, DOE FUNDED 51 PROJECTS TOTALING OVER \$9.5 MILLION



PV Water Pumping



# DOE's Tribal Energy Program Funding Opportunities

First Steps Toward Developing Renewable Energy and

**Energy Efficiency** 

Strategic planning

- Energy options analysis
- Capacity building
- Organizational development



Chairman Tex Hall, Three Affiliated Tribes

Ground Breaking for Wind Turbine on the Fort

Berthold Reservation

### Renewable Energy Development on Tribal Lands

- Feasibility studies
- Development projects (cost shared)





# **Tribal Energy Program**

IN FY2002 AND FY2003, DOE FUNDED 38 PROJECTS TOTALING \$7.5 MILLION

### Renewable Energy Projects (Funded FY2002)

- 12 Feasibility Studies in 12 States (\$900,000)
- 2 Development Projects in 2 States (\$2,200,000)

### Renewable Energy Projects (Funded FY2003)

- 8 Feasibility Studies (FY2002) in 8 States (\$1,500,000)
- 3 Development Projects in 2 States (\$1,200,000)
- 4 Feasibility Studies in 4 States (\$900,000)
- 9 "First Steps" Projects in 6 States (\$800,000)



Northern Cheyenne Nation

Wind Resource Assessment



### **Tribal Energy Projects**

# TOTAL OF 22 PROJECTS TOTALING \$4.6 MILLION FUNDED FROM FY2002 SOLICITATION

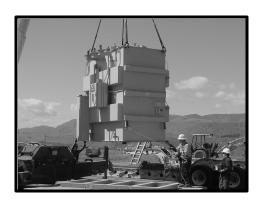
#### **FY2002 Funded Projects:**

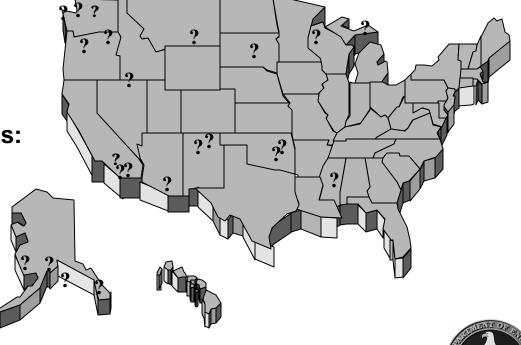
? = 12 Feasibility Studies

? = 2 Developmental Projects

FY2003 Funded FY2002 Projects:

? = 8 Feasibility Studies





Colville Indian Power and Veneer Energy Substation



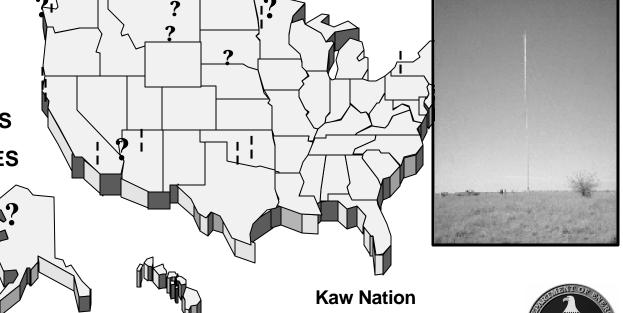
DOE Awarded \$2.9 Million to 16 Tribal Clean Energy Projects in FY2003

#### **FY2003 PROJECTS:**

? 3 DEVELOPMENTAL PROJECTS

? 4 FEASIBILITY STUDIES

9 FIRST STEPS STUDIES

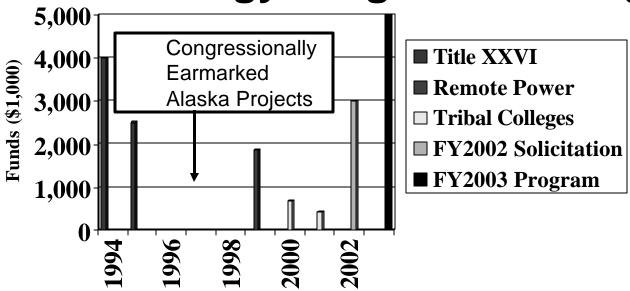


**Wind Resource Assessment** 





### **Tribal Energy Program Funding**



	1994	1995	1999	2000	2001	2002	2003
Title XXVI	4,000	2,500					
Remote Power			1,900				
Tribal Colleges				700	430		
FY 2002 Solicitation						3,000	
FY2003 Program*							5,000

<sup>\*</sup> Congress appropriated \$6,000 with \$1,000 being non-discretionary



# DOE's Tribal Energy Program Funding

	FY2002	FY2003	FY2004
Requested	\$2,100	\$8,307	\$6,000
Enacted	\$3,000	\$6,000*	\$5,000**
Discretionary	\$3,000	\$5,000	\$1,700



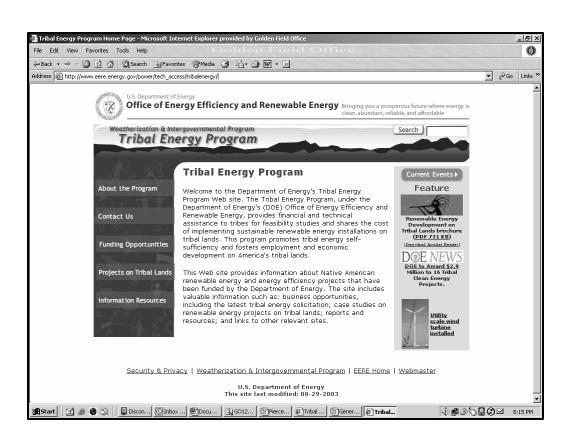
<sup>\*</sup> Total of \$1,000,000 earmarked to the Council of Energy Resource Tribes (CERT)

<sup>\*\*</sup> Total of \$3,300,000 earmarked to CERT, ICOUP, and Pyramid Lake Paiute



### **Tribal Energy Web Site**

- Features
- Current Events
- Funding Opportunities
- Projects on Tribal Lands
  - Project Overviews
  - Status and Reports
  - Contacts
- Information Resource
- Contacts



Tribal Energy Program www.eere.energy.gov/tribalenergy





# Web-Based Guide to Tribal Energy Development

- Framework for the planning and implementation of energy development strategies
- Tool for addressing energy needs and an aid in achieving energy vision

#### **Strategic Planning**

Where do you want to get to?



#### **Options Analysis**

Possible roads to the future.



#### **Institutional Structures**

The vehicles of change.



#### **Project Development**

Where the rubber meets the road.





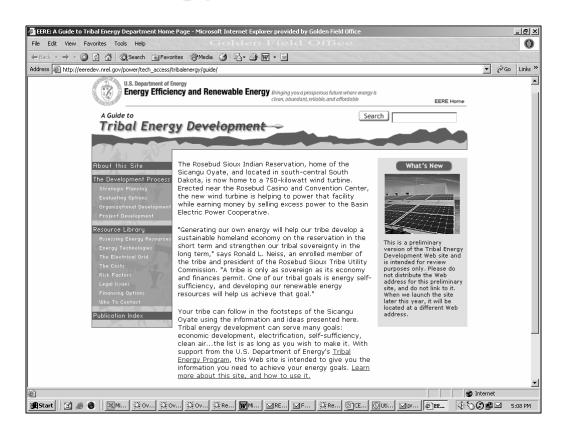
# **Guide to Tribal Energy Development**

### **Development Processes**

- Strategic Planning
- Options Analysis
- Organizational Development
- Project Development

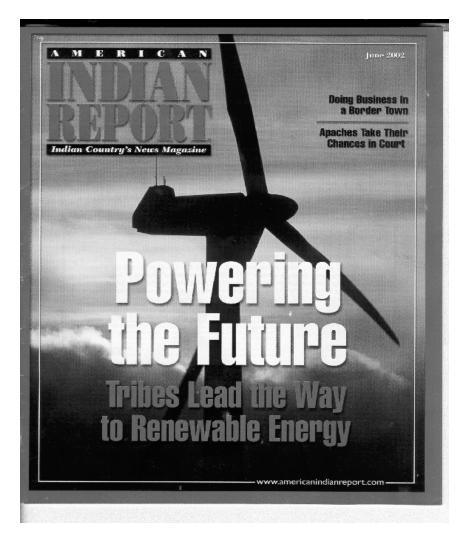
### Resource Library

- Energy Resources
- Technologies
- Costs
- Risk Factors
- Legal Issues
- Financing Options
- Contacts









# "Tribes Leading the Way to Renewable Energy"

American Indian Report June 2002

